AMENDMENTS TO THE CLAIMS

1. (Canceled)

2. (Canceled)

3. (Currently amended) An ~~The~~ apparatus ~~of claim 2~~ for monitoring the movement of a patient's spine comprising:

an elongated member adapted to be disposed longitudinally adjacent to the patient's spine and further adapted to be flexible in the midsagittal plane and substantially inflexible in the frontal plane;

a first sensor mounted to the elongated member and disposed to monitor flexion and extension motion of the patient's spine in the midsagittal plane, wherein the first sensor includes at least one strain gage; and

a second sensor mounted to the elongated member and disposed to monitor lateral motion of the patient's spine in the frontal plane, wherein the second sensor is an optical sensor.

4. (Canceled)

5. (Currently amended) An ~~The~~ apparatus ~~of claim 4~~ for monitoring the movement of a patient's spine comprising:

an elongated member adapted to be disposed longitudinally adjacent to the patient's spine and

02/07/2008 PCHOMP 08889526 10779334
01 FC:2201 315.00 OP

further adapted to be flexible in the midsagittal plane and substantially inflexible in the frontal plane;

a first sensor mounted to the elongated member and disposed to monitor flexion and extension motion of the patient's spine in the midsagittal plane; and

a second sensor mounted to the elongated member and disposed to monitor lateral motion of the patient's spine in the frontal plane, wherein the second sensor is an optical sensor, and further wherein the second sensor is an optical mouse sensor.

6. (Canceled)

7. (Canceled)

8. (Currently amended) An ~~The~~ apparatus ~~of claim 1~~ for monitoring the movement of a patient's spine comprising:

an elongated member adapted to be disposed longitudinally adjacent to the patient's spine and further adapted to be flexible in the midsagittal plane and substantially inflexible in the frontal plane, wherein the elongated member has a first end and a second end opposite the first end;

a first sensor mounted to the elongated member and disposed to monitor flexion and extension motion of the patient's spine in the midsagittal plane, ~~and further~~ wherein the first sensor is mounted to the elongated member near the first end; and

a second sensor mounted to the elongated member and disposed to monitor lateral motion of the patient's spine in the frontal plane, wherein ~~and~~ the second sensor is mounted to the elongated member near the second end.

9. (Canceled)

10. (Currently amended) An ~~The~~ apparatus ~~of claim 9~~ for monitoring the movement of a patient's spine comprising:

an elongated member adapted to be disposed longitudinally adjacent to the patient's spine and further adapted to be flexible in the midsagittal plane and substantially inflexible in the frontal plane;

a first sensor mounted to the elongated member and disposed to monitor flexion and extension motion of the patient's spine in the midsagittal plane, wherein the first sensor is adapted to be disposed along the patient's spine at approximately the location of the 1st sacral vertebrae; and

a second sensor mounted to the elongated member and disposed to monitor lateral motion of the patient's spine in the frontal plane, wherein the second sensor is adapted to be disposed along the patient's spine at approximately the location of the 12th thoracic vertebrae.

11. (Currently amended) An ~~The~~ apparatus ~~of claim 1~~ for monitoring the movement of a patient's spine comprising:

an elongated member adapted to be disposed longitudinally adjacent to the patient's spine and further adapted to be flexible in the midsagittal plane and substantially inflexible in the frontal plane;

a first sensor mounted to the elongated member and disposed to monitor flexion and extension motion of the patient's spine in the midsagittal plane;

a second sensor mounted to the elongated member and disposed to monitor lateral motion of the patient's spine in the frontal plane; and

~~further comprising~~ a corset wearable by the patient and having a pocket, wherein the elongated member is substantially disposed inside of the pocket.

12. (Previously presented) The apparatus of claim 11 wherein the second sensor is disposed inside of the pocket.

13. (Previously presented) The apparatus of claim 12 wherein the corset includes a track disposed inside of the pocket, and further wherein the second sensor is an optical sensor disposed to detect movement of the track as the patient's spine moves laterally in the frontal plane.

14. (Canceled)

15. (Canceled)

16. (Canceled)

17. (Previously presented) An apparatus for monitoring the movement of a patient's spine comprising:

an elongated member adapted to be disposed longitudinally along the patient's spine, wherein the elongated member has a first end and a second end opposite the first end;

a first sensor mounted to the elongated member and disposed to monitor flexion and extension motion of the patient's lumbar spine in the midsagittal plane, wherein the first sensor is mounted to the elongated member near the first end; and

a second sensor mounted to the elongated member and disposed to monitor lateral motion of the patient's lumbar spine in the frontal plane, wherein the second sensor is an optical sensor, and further wherein the second sensor is mounted to the elongated member near the second end.

18. (Previously presented) The apparatus of claim 17 wherein the second sensor is an optical mouse sensor.

19. (Previously presented) The apparatus of claim 17 further comprising a computer in electrical communication with the second sensor, wherein the computer includes a display having a cursor, wherein the second

sensor controls movement of the cursor, and further wherein the computer interprets the position of the cursor to graphically show lateral movement of the patient's spine on the display.

20. (Previously presented) The apparatus of claim 17 further comprising a corset wearable by the patient, wherein the corset includes a pocket and a track disposed inside of the pocket, and further wherein the second sensor is disposed inside of the pocket to detect movement of the track as the patient's spine moves laterally in the frontal plane.